

App. No. 09/846,681  
Amendment Dated: November 12, 2004  
Reply to Office Action of August 11, 2004

**Amendments to the Claims:**

Claim 1 (Currently Amended): A method for thermally simulating a circuit over a network, the circuit having components laid out on a board, comprising:  
determining the circuit to be thermally simulated over the network;  
determining a set of thermal characteristics for the circuit;  
performing a thermal simulation of the circuit based on the determined set of thermal characteristics, wherein the thermal simulation is performed on a computer that is different from a computer the user is using to access the network;  
producing a result based on the thermal simulation of the circuit; and  
providing the result over the network to a the user.

Claim 2 (original): The method of Claim 1, further comprising:  
allowing the user to change a characteristic of the circuit;  
determining when the user has changed the characteristic of the circuit; and  
performing a thermal simulation of the circuit when a determination has been made that the user has changed the characteristic of the circuit.

Claim 3 (original): The method of Claim 1, further comprising allowing the user to order the circuit over the network.

Claim 4 (original): The method of Claim 2, wherein producing the result based on the thermal simulation, further comprises, producing a design document for the circuit.

Claim 5 (original): The method of Claim 2, wherein providing the result over the network to a user further comprises allowing the user to share the circuit.

Claim 6 (original): The method of Claim 2, wherein producing the result based on the thermal simulation, further comprises producing operating temperatures of the components.

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Claim 7 (original): The method of Claim 2, wherein producing the result based on the thermal simulation, further comprises producing a graphical plot of temperature intensities across the board.

Claim 8 (original): The method of Claim 2, wherein producing the results based on the thermal simulation, further comprise:  
creating a graphical layout showing the location of components on the board; and  
displaying the graphical layout to the user.

Claim 9 (original): The method of Claim 2, wherein allowing the user to change the characteristic of the circuit, further comprises allowing the user to specify at least one thermal characteristic of the circuit.

Claim 10 (original): The method of Claim 9, further comprising allowing the user to add at least one heat sink to the circuit.

Claim 11 (original): The method of Claim 9, wherein allowing the user to specify the at least one thermal characteristic of the circuit, further comprises allowing the user to add at least one fan to the circuit.

Claim 12 (original): The method of Claim 11, wherein allowing the user to add the at least one fan to the circuit to provide airflow further comprises allowing the user to change a direction and airflow of the at least one fan.

Claim 13 (Currently Amended): A modulated data signal embodied in a carrier wave and representing computer executable instructions for thermally simulating a circuit over a network, comprising:

determining the circuit to simulate over the network;  
determining a set of characteristics for the circuit;

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performing a thermal simulation of the circuit based on the determined set of characteristics, wherein the thermal simulation is performed on a computer that is different from a computer the user is using to access the network;

producing a thermal result based on the thermal simulation of the circuit; and

providing a result based on the thermal result over the network to a the user.

Claim 14 (original): The modulated data signal of Claim 13, further comprising:  
allowing the user to change a characteristic from the set of characteristics for the circuit;  
and  
performing the thermal simulation when the user changes the characteristic.

Claim 15 (original): The modulated data signal of Claim 13, further comprising  
allowing the user to order the circuit over the network.

Claim 16 (original): The modulated data signal of Claim 13, wherein providing the result, further comprises providing a design document for the circuit.

Claim 17 (original): The modulated data signal of Claim 15, wherein providing the result, further comprises allowing the user to share the circuit.

Claim 18 (original): The modulated data signal of Claim 13, wherein providing the result, further comprises:

creating a graphical layout showing the location of components on the board; and  
displaying the graphical layout to the user.

Claim 19 (original): A system for thermally simulating a circuit over a network,  
comprising:

a client having a client network connection device operative to connect the client to the network;

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a server having a server network connection device operative to connect the server to the network; and operative to perform actions, including:

- communicating with the client;
- determining the circuit to simulate;
- determining a thermal characteristic for the circuit;
- performing a thermal simulation of the circuit based on the determined thermal characteristic;
- providing a result to the client over the network based on the thermal simulation.

Claim 20 (original): The system of Claim 19, further comprising:  
allowing the client to change the thermal characteristic; and  
performing the thermal simulation the thermal characteristic is changed.

Claim 21 (original): The system of Claim 19, further comprising allowing the circuit to be ordered over the network.

Claim 22 (original): The system of Claim 19, wherein providing the result to the client over the network based on the thermal simulation further comprises delivering a design document to the client.

Claim 23 (original): The system of Claim 19, wherein providing the result to the client over the network based on the thermal simulation further comprises allowing the circuit to be shared.

Claim 24 (Currently Amended): An apparatus for thermally simulating a circuit over a network, comprising:

- a means for determining the circuit to be thermally simulated over the network;
- a means for determining a set of thermal characteristics for the circuit;

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a means for performing a thermal simulation of the circuit based on the determined set of thermal characteristics, wherein the thermal simulation is performed on a computer that is different from a computer the user is using to access the network;

a means for producing a result based on the thermal simulation of the circuit; and

a means for providing the result over the network to a the user.

Claim 25 (original): The apparatus of Claim 24, further comprising a means for ordering the circuit over the network.